



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

(603) 271-3406 FAX (603) 271-7894



January 14, 2004
Letter of Deficiency
DSP#04-003

Mr. Chris Countie
Pennichuck Water Works
4 Water Street
P.O. Box 448
Nashua, NH 03061-0448

RE: Merrimack Village Dam #156.01, Merrimack

Dear Mr. Countie:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 21, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

1. The dam cannot pass the 50-year storm event without overtopping the abutments of the dam;
2. A buildup of sediment, measured as 9 feet in some locations, has developed in front of the gate structure preventing operation of both the sluice gate and stoplog bay;
3. The discharge channel below the gate and stoplog bay has become inundated with vegetation;
4. An area of leakage was noted along the downstream left spillway training wall;
5. There were trees and shrubs on both the right and left abutment walls of the dam;
6. There were areas of deteriorated concrete on the upstream lip of the spillway at the interface between the left abutment wall and spillway;
7. Sections of the spillway downstream face were examined at the far right end of the dam. Voids 2-inches deep were noted;
8. There were sections of the interior face of the left spillway training wall that were missing stonework and showed signs of related deterioration; and
9. There is no operation and maintenance plan (O&M) on file with the DES.

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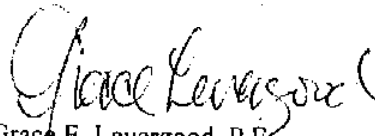
schedule. We understand that you are considering dam removal at this site and that you have submitted a grant proposal, that is currently undergoing review, to conduct a feasibility study of the dam's removal. It is also our understanding that should this grant be awarded, you will work with the Town, the DES River Restoration Coordinator and other interested parties to gather the information necessary for the Town to reach a decision of whether or not to take ownership of the dam and address the deficiencies identified in this letter.

Please provide written notification to DES at the conclusion of the proposed feasibility study and indicate whether the option to remove the dam will be pursued by you, or that the Town is committed to taking ownership of the dam. If a decision is made to pursue removal, modification to this compliance schedule will be made. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

Sincerely,



Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments Guideline for an O&M plan, DB8, DB13

cc: Gretchen Rule

Town of Merrimack

Stephanie Lindloff, River Restoration Coordinator, NHDES

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